



CONSTRUCTION EQUIPMENT

VOLVO EC480EL 314321 - HYDRAULIC SYSTEM



Sample No: VCP404251
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No:



SAMPLE INFORMATION

Sample Number	VCP404251	VCP309697	VCP309971	VCP309684
Sample Date	30 Jan 2024	28 Mar 2023	29 Oct 2021	22 Jun 2021
Machine Hours	3036	2109	995	501
Oil Hours	3036	0	995	501
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	ABNORMAL	NORMAL	NORMAL	ATTENTION

CITY OF WISCONSIN RAPIDS

444 W GRAND AVE
 WISCONSIN RAPIDS, WI
 US 54495

Contact: MARK MCAULEY
 mmcauley@wirapids.org
 T: (715)421-8266
 F:

OIL CONDITION

Visc @ 40°C	cSt	40.2	40.6	41.7	42.6
Acid Number (AN)	mg KOH/g	0.41	0.43	0.398	0.480

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		▲ 43566	1410	3586	▲ 63949
Particles >6µm		7356	242	123	3119
Particles >14µm		388	11	6	18
ISO 4406:1999 (c)		23/20/16	18/15/11	19/14/10	23/19/11
Silicon	ppm	5	5	7	2
Sodium	ppm	<1	0	1	0
Potassium	ppm	0	2	<1	0

Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. Moderate concentration of visible metal present. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

WEAR METALS

Iron	ppm	7	5	5	2
Copper	ppm	20	16	18	8
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	0	0	<1	0
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	14	8	4	2
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	2
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	118	132	242	98
Magnesium	ppm	7	10	22	11
Zinc	ppm	461	525	907	483
Phosphorus	ppm	383	414	731	363
Barium	ppm	0	0	0	0
Boron	ppm	<1	<1	9	4

Depot: CITWIS
Unique No: 10870490
Signed: Don Baldrige
Report Date: 09 Feb 2024

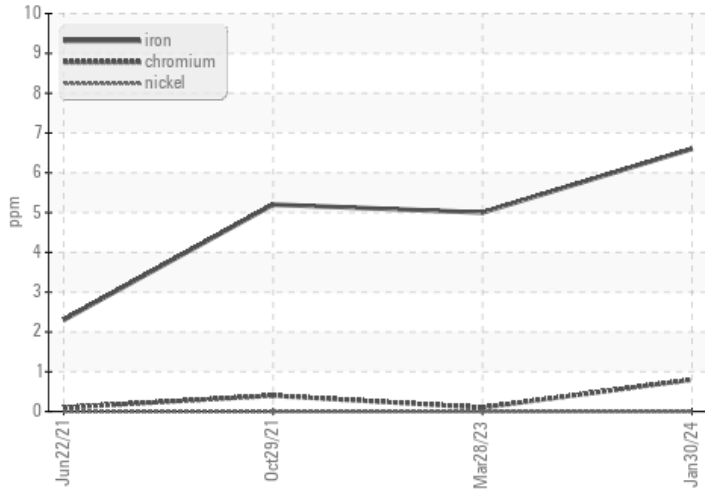


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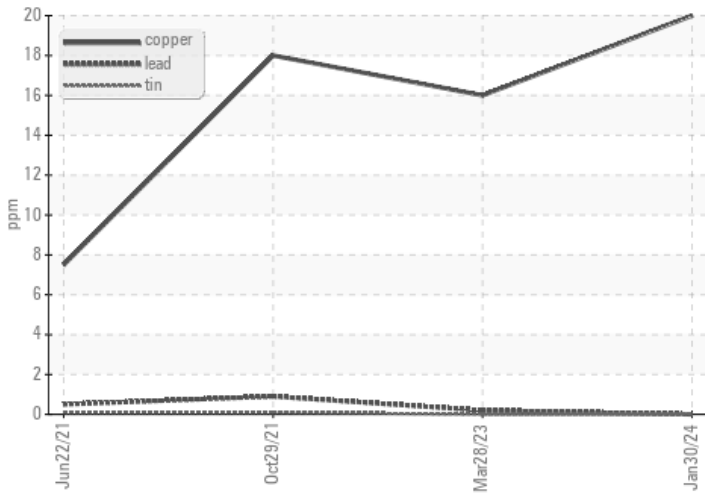


GRAPHS

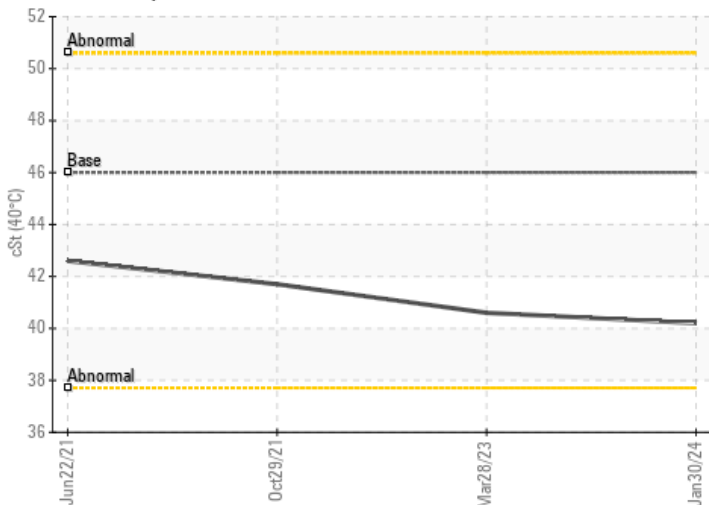
Ferrous Alloys



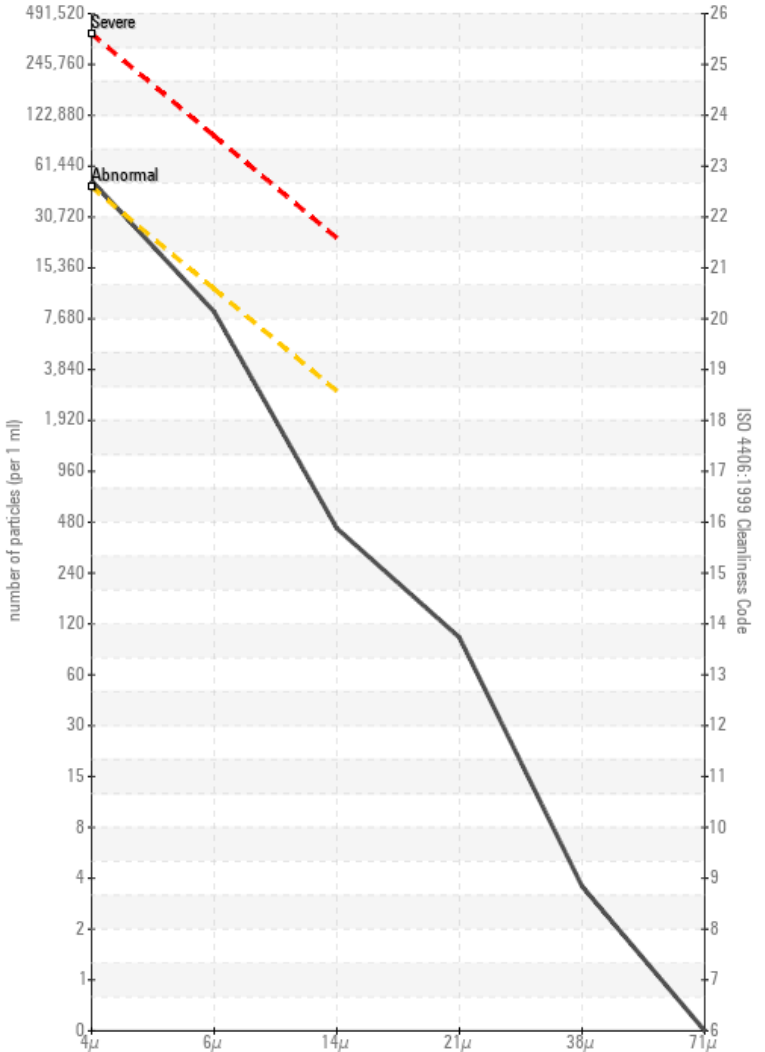
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

